## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

## (19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 21 October 2004 (21.10.2004)

PCT

## (10) International Publication Number WO 2004/089284 A 2

(51) International Patent Classification7:

**A61K** 

(21) International Application Number:

PCT/US2004/010059

(22) International Filing Date: 1

1 April 2004 (01.04.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/458,948 60/489,504 1 April 2003 (01.04.2003) US 24 July 2003 (24.07.2003) US

(71) Applicant (for all designated States except US): IN-TRADIGM CORPORATION [US/US]; Suite K, 12115 Parklawn Drive, Rockville, MD 20852 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): LU, Patrick, Y. [US/US]; 17093 Briardale Road, Rockville, MD 20855 (US). XIE, Frank, Y. [CN/US]; 13921 Rockingham Road, Germantown, MD 20874 (US). WOODLE, Martin, C. [US/US]; 8205 Beech Tree Road, Bethesda, MD 20817 (US). LIU, Yijia [CN/US]; 24 Shady Elm Mews, Gaithersburg, MD 20878 (US). TANG, Quinn T. [US/US]; 31 Longmeadow Drive, Gaithersburg, MD 20878 (US). XU, Jun [CN/US]; 18120 Coachman Road, Germantown, MD 20878 (US).

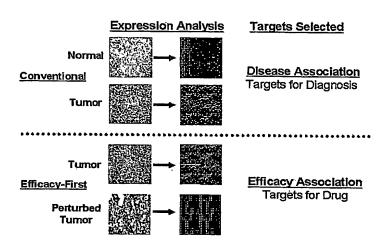
- (74) Agents: BOOTH, Paul, M. et al.; Heller Ehrman White & McAuliffe LLP, Suite 300, 1666 K Street, NW, Washington, DC 20006-1228 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

 without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: TARGETS FOR TUMOR GROWTH INHIBITION



(57) Abstract: The present invention relates to methods for treating cancers by manipulating a target gene expression by up-regulation, silencing and/or down-regulation of the gene, such as EGFR-RP, TRA1, MFGE8, TNFSF13 and ZFP236, respectively. The methods are useful in treating cancers and/or inhibiting tumor growth by enhancing expression of a gene that is validated as a target such as ICT1030, for protein, peptide drug and gene therapy modalities; or by RNA interference to silence and/or down-regulate targets such as ICT1024, ICT1025 and ICT1031 and ICB1003 that are validated for antibody, small molecule and other inhibitor drug modalities.